

first connector have been displayed, automatically creating and displaying a second connector for connecting the displayed first object and the third object and a third connector for connecting the displayed third object and the second object.

B1  
CONT.

2. (ONCE AMENDED) The graphic editing apparatus according to claim 1, wherein when the first connector and the third object overlap each other, said interactive graphical editing unit automatically creates and displays the second and third connectors.

3. (ONCE AMENDED) The graphic editing apparatus according to claim 1, further comprising:  
a judgment unit judging automatically whether a distance between the first object and the second object is sufficient to accommodate the third object between them; and  
a shift unit, if the distance is not sufficient, automatically shifting at least one of the first and second objects.

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C2  
D2  
B2

5. (ONCE AMENDED) A graphic editing apparatus, comprising:  
a display unit displaying a graphic including a first object and a second object which are connected with each other using a first connector, where the first object, second object, and first connector are all displayed on a display screen; and  
an interactive graphical editing unit, when the first connector is interactively selected after the first object, second object, and first connector have been displayed, automatically creating and displaying a second connector for connecting the displayed first object and the third object and a third connector for connecting the displayed third object and the second object.

6. (ONCE AMENDED) The graphic editing apparatus according to claim 5, wherein said interactive editing unit automatically shifts the displayed second object, displays the third object in a position where the second object was displayed before the first connector is interactively selected, and stops displaying the first connector.

7. (ONCE AMENDED) The graphic editing apparatus according to claim 5, further comprising a coordinate system providing unit providing a virtual coordinate system defining boxes, in which each box is defined as area for displaying one object, wherein said display unit displays each object using the virtual coordinate system, and said

interactive editing unit locates each object using the virtual coordinate system.

Sub C3/ D3  
8. (ONCE AMENDED) A graphic editing apparatus, comprising:  
a display unit displaying a first object, a plurality of second objects and a plurality of first connectors for connecting the first object and the plurality of second objects, where the first object, the plurality of second objects, and the plurality of first connectors are all displayed on a display screen; and  
an interactive graphical editing unit, when one or more of the plurality of first connectors are interactively selected after the first object, the plurality of second objects, and the plurality of first connectors have been displayed, automatically creating and displaying a second connector for connecting the displayed first object and the third object, and one or more third connectors for connecting one or more of the displayed second objects connected to the interactively selected first connector and the third object.

9. (ONCE AMENDED) A graphic editing method, comprising:  
displaying a graphic including a first object and a second object which are connected with each other using a first connector, where the first object, second object, and first connector are all displayed on a display screen; and  
when a third object is interactively placed in a predetermined position in relation to the first connector after the first object, second object, and first connector have been displayed, automatically creating and displaying a second connector for connecting the displayed first object and the third object and a third connector for connecting the third object and the second object.

10. (ONCE AMENDED) A graphic editing method:  
displaying a graphic including a first object and a second object which are connected with each other using a first connector, where the first object, the second object, and the first connector are all displayed on a display screen; and  
after the first object, second object, and first connector have been displayed and when the first connector is interactively selected, automatically creating and displaying a second connector for connecting the first object and the third object and a third connector for connecting the third object and the second object.

11. (ONCE AMENDED) A storage medium on which a program enabling a computer to execute a process is stored, the process comprising:

displaying a graphic including a first object and a second object which are connected with each other using a first connector, where the first object, the second object, and the first connector are all displayed on a display screen; and

after the first object, second object, and first connector have been displayed and when a third object is interactively placed in a predetermined position in relation to the first connector, creating and displaying a second connector for connecting the displayed first object and the third object and a third connector for connecting the third object and the second object.

12. (ONCE AMENDED) A storage medium on which a program enabling a computer to execute a process is stored, the process comprising:

displaying a graphic including a first object and a second object which are connected with each other using a first connector, where the first object, the second object, and the first connector are all displayed on a display screen; and

after the first object, second object, and first connector have been displayed and when the first connector is interactively selected, automatically creating and displaying a second connector for connecting the displayed first object and the third object and a third connector for connecting the displayed third object and the second object.

13. (ONCE AMENDED) A method of interactively graphically inserting a node into a displayed graph comprising displayed nodes and connectors graphically connecting the nodes, said method comprising:

interactively determining a displayed first connection in the displayed graph by comparing a position of the first connection with a position of an object being moved by the input device, where the displayed first connection connects a first displayed node and a second displayed node of the displayed graph; and

responsive to said interactive determining, automatically displaying and inserting the insertion node into the graph by automatically creating and displaying a second connection connecting the insertion node to the displayed first node, and by automatically creating and displaying a third connection connecting the insertion node to the displayed second node.

14. (NEW) A graphic editing apparatus, comprising:

a display unit displaying a first object, a second object, and a first connector, the objects being graphically connected with each other by the first connector; and

an editing unit, responsive to a displayed third object being interactively located in a predetermined position in relation to the first connector, creating for display a second connector graphically connecting the displayed first object and the displayed third object, and creating a third connector graphically connecting the third object and the second object, where the second and third connectors reflect the third object being newly related to the first and second objects.

15. (NEW) A method, comprising:

interacting with a graphical user interface to insert a new node between edge-connected nodes of a displayed graph; and

responsive to interactively inserting the new node, automatically displaying new lines in the graph and automatically undisplaying a line from the graph, where the displaying and undisplaying reflects changes to edges of the graph caused by the interactive inserting.

16. (NEW) A method, comprising:

storing a graph data structure comprising first node data, second node data, and first relationship data logically relating the first node data to the second node data;

displaying first and second graphical nodes portraying the first node data and the second node data, and displaying a first graphical line portraying the first relationship data by graphically connecting the first and second graphical nodes;

after said displaying, adding new node data to the graph data structure;

after said displaying, interactively selecting the first displayed line; and

in response to said interactive selecting: undisplaying the selected first line, displaying a new node corresponding to the new node data, adding to the graph data structure new relationship data that relates the new node data to the first node data and the second node data, displaying a new first line and a new second line portraying the new relationship data and graphically connecting the new graphical node to the first and second graphical nodes.

17. (NEW) A method, comprising:

storing a graph data structure comprising a set of node variables and information logically interrelating the node variables;

displaying, with a graphical user interface (GUI), graphical nodes and graphical lines

graphically connecting the graphical nodes, where the graphical nodes correspond to the node variables, and where the graphical lines correspond to the information logically relating the node variables;

after said displaying and storing, adding a new node variable to the set of node variables, where the new node variable is unrelated to any other variables in the set;

interacting with the GUI to select a first graphical line from among the displayed graphical lines, where the selected first graphical line graphically connects a first and second of the displayed graphical nodes, where a first node variable from the set of node variables corresponds to the displayed first graphical node, where a second node variable from the set of variables corresponds to the displayed second graphical node, and where the displayed first graphical line represents some of the relating information that logically relates the first and second node variable; and

responsive to selecting the first graphical line, altering the logical relating information to logically unrelate the first and second node variables, causing the selected first line to be undisplayed, newly displaying a third graphical node corresponding to the new node variable, logically relating the new variable to first and second variables of the set of variables, newly displaying a first graphical line connecting the newly displayed third graphical node with the first graphical node, and newly displaying a second graphical line connecting the newly displayed third graphical node with the second graphical node.

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